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Indian Standard
GLOSSARY OF TERMS
USED IN ACETYLENE GENERATORS
(First Reprint MAY 1983)

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GLOSSARY OF TERMS USED IN ACETYLENE GENERATORS

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Indian Standard

GLOSSARY OF TERMS USED IN ACETYLENE GENERATORS

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 2 May 1977, after the draft finalized by the Gas Cylinders Sectional Committee had been approved by the Mechanical Engineering Division Council.

0.2 This glossary has been prepared with the object of standardizing and coordinating the technical terms in current use in the field of acetylene generators.

0.3 Generation of acetylene gas is regulated under the Carbide of Calcium Rules, 1937 of the Government of India, as amended from time to time. This standard has been prepared in consultation and agreement with the statutory authorities under those rules.

1. SCOPE

1.1 This standard covers a glossary of general terms used in the field of acetylene generators.

2. TERMINOLOGY

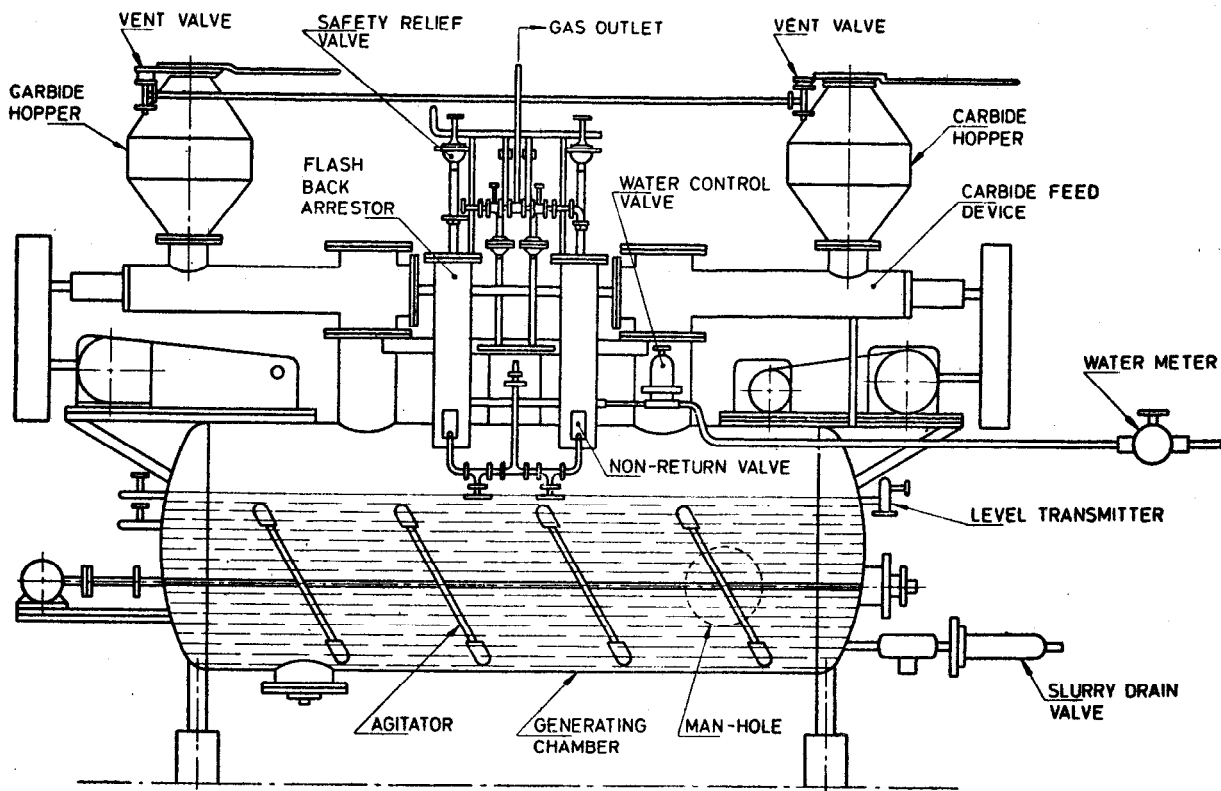
2.0 For the purpose of this standard, the following definitions shall apply (*see also* Fig. 1 to 4).

2.1 Automatic Carbide Feed — A feed mechanism in which the feeding of carbide is done automatically by the rotation of a worm gear or by a vibrator.

2.2 Automatic Generator — A generator in which the pressure within the generator controls, through an automatic mechanism, the feeding of carbide or water for the generation of acetylene.

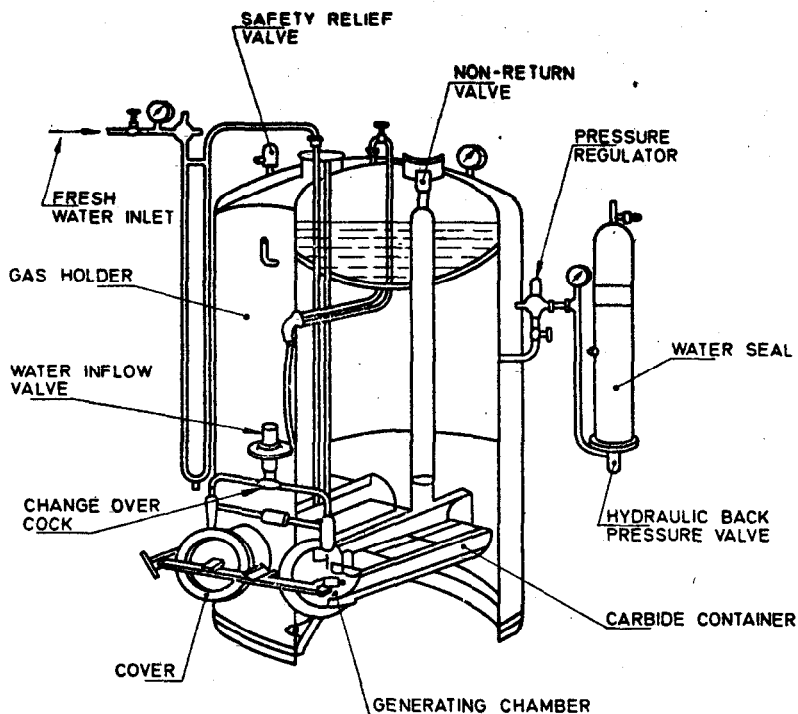
2.3 Automatic Slurry Drain — A drain where the slurry valve opens automatically depending on the water volume in the generator.

2.4 Carbide Holder (Hopper) — The part of the generating plant in which the calcium carbide is placed.



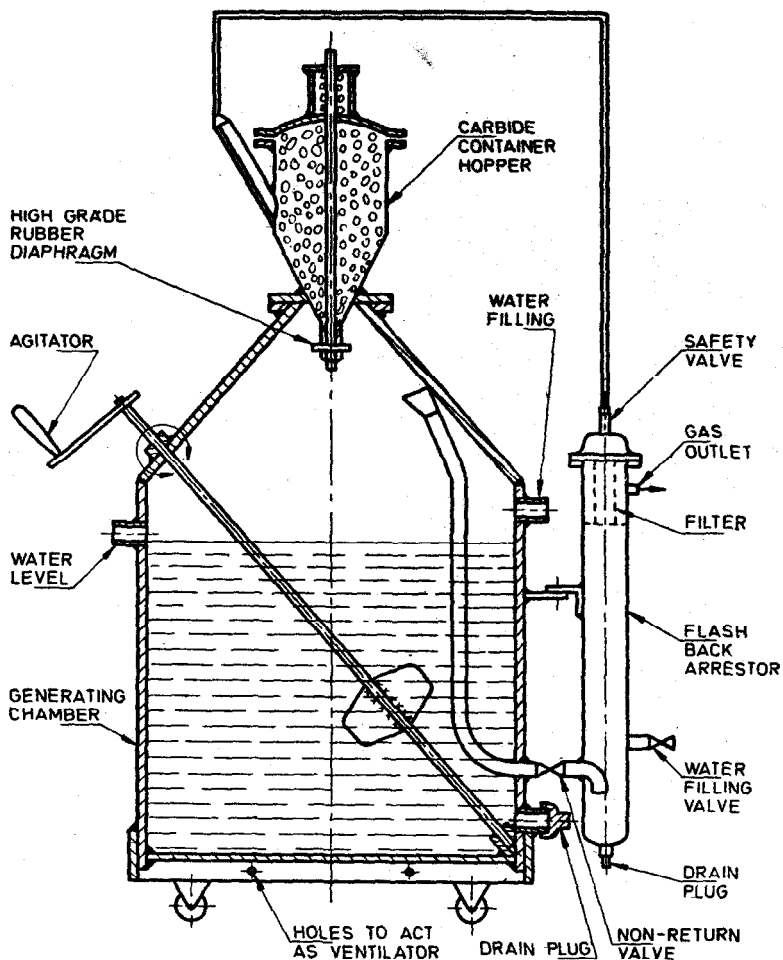
NOTE — This sketch is merely illustrative. Actual design and constructional details may or may not correspond to this sketch.

FIG. 1 STATIONARY CARBIDE TO WATER GENERATOR (AUTOMATIC)



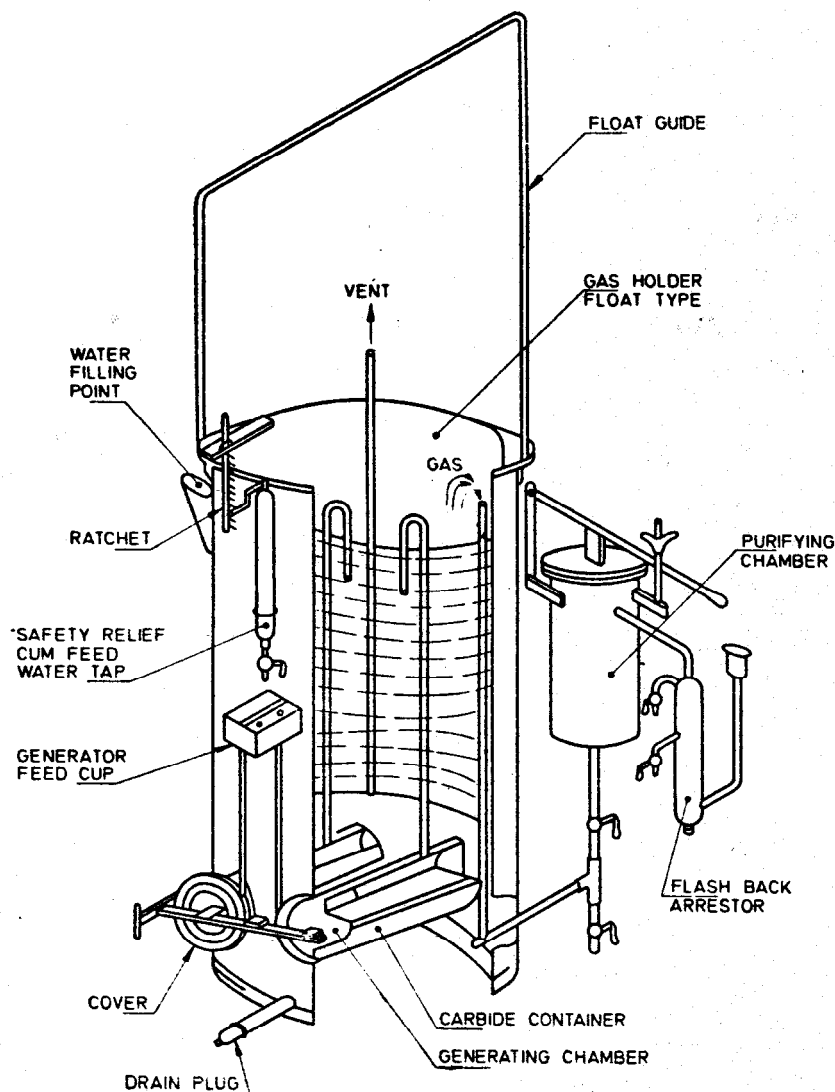
NOTE — This sketch is merely illustrative. Actual design and constructional details may or may not correspond to this sketch.

FIG. 2 STATIONARY WATER TO CARBIDE GENERATOR
(NON-AUTOMATIC)



NOTE—This sketch is merely illustrative. Actual design and constructional details may or may not correspond to this sketch.

FIG. 3 PORTABLE CARBIDE TO WATER GENERATOR



NOTE — This sketch is merely illustrative. Actual design and constructional details may or may not correspond to this sketch.

FIG. 4 PORTABLE WATER TO CARBIDE GENERATOR

2.5 Continuous Generator — A generator which need not be stopped for refilling of the carbide or the water.

2.6 Filter — A device for the removal of solid particles from the acetylene by physical means.

2.7 Flash-Back — A term used to cover any form of local explosion or decomposition which may be transmitted through the piping system to the generator.

2.8 Flash-Back Arrestor — *see* Hydraulic Back-Pressure Valve.

2.9 Generating Chamber — The part of the generating plant in which the reaction between calcium carbide and water takes place.

2.10 Hydraulic Back-Pressure Valve (Flash-Back Arrestor) — A device or fitting designed to prevent a back pressure of oxygen or air or the propagation of a flash-back into the generator.

2.11 Non-automatic Generator — A generator in which the generated acetylene is stored in a gas holder or gasometer, and the feed of carbide is controlled by the rise and fall of the gasometer bell.

2.12 Non-return Valve — A device designed to prevent the reverse flow.

2.13 Portable Generator — A generator designed and intended to be transported from place to place whilst containing calcium carbide, water and acetylene.

2.14 Regulator — A device, generally of the diaphragm type, for controlling the flow of acetylene and maintaining a steady delivery pressure at the outlet of the generator.

2.15 Safety Relief Device (Safety Relief Valve) — A device designed to relieve the generating plant or the supply system of acetylene in excess of the capacity of the plant.

2.16 Scrubber — A device by means of which acetylene is washed.

2.17 Stationary Generator — A generator designed and intended to be installed and used in one place with vent, supply and other piping permanently connected.